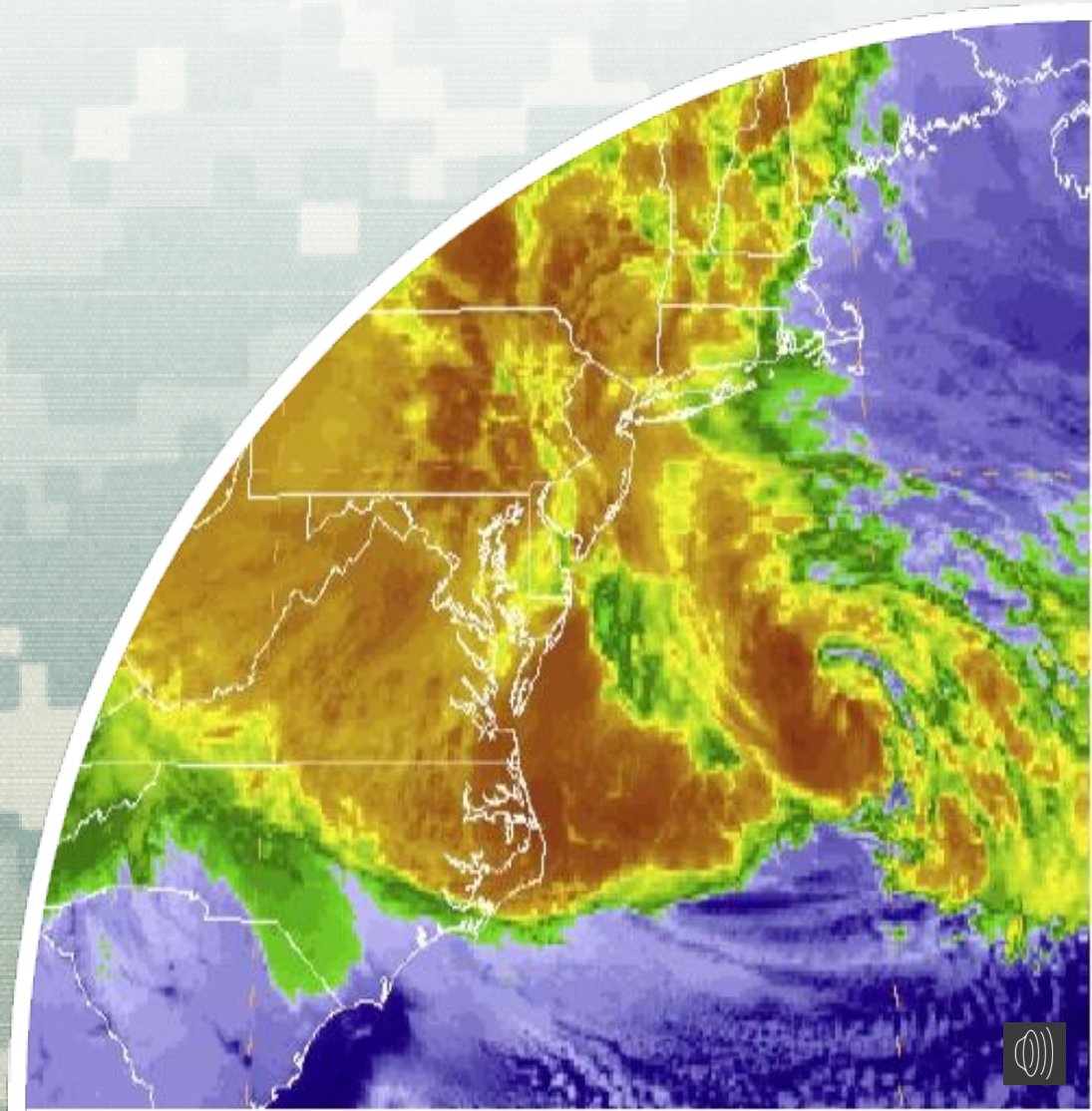
North Atlantic Coast Comprehensive Study

U.S. Army Corps of Engineers
Coastal Storm Risk Management
Planning Center of Expertise



Overview

- Authority & Study Area
- Goals
- Scope
- Products
- Schedule
- Communication & Outreach
- Next Steps

Authority

"That using **up to $20,000,000 ($19M after sequestration)** of the funds provided herein, the Secretary shall conduct a comprehensive study to address the flood risks of vulnerable coastal populations in areas that were affected by Hurricane Sandy within the boundaries of the North Atlantic Division of the Corps…"

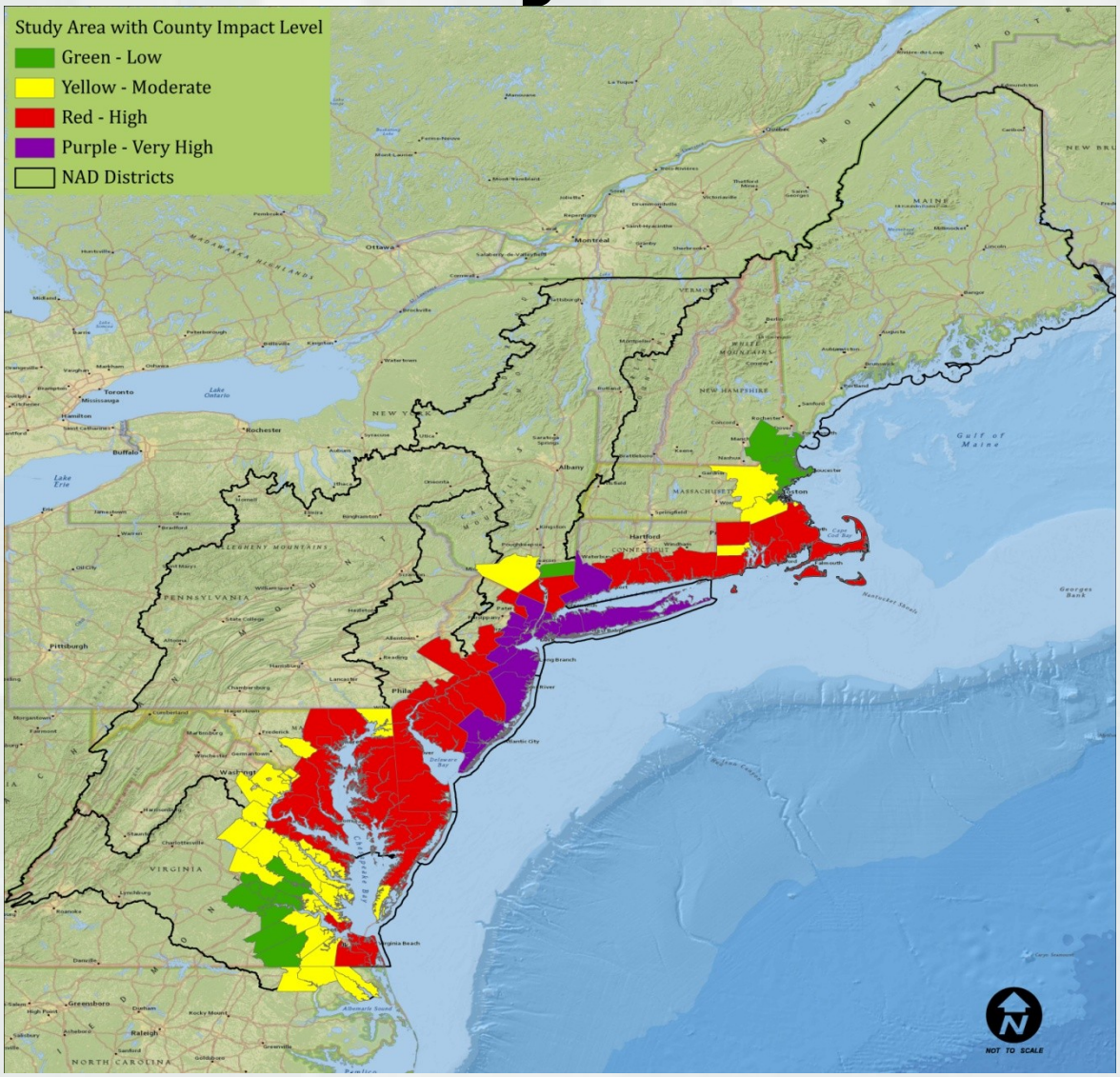
- Up to $20M for Comprehensive Study **by January 2015**; unused funds available for future USACE studies

- "**Address flood risks of vulnerable coastal populations** affected by Hurricane Sandy within the North Atlantic Division…"
  - Coastline as defined by FEMA's Hurricane Sandy storm surge data
  - Affected by erosion, precipitation, winds, surge, etc.

- Ensure study is consistent with **interagency** efforts

- **Identify institutional barriers** and develop strategies

Study Area


Study Area with County Impact Level
Green - Low
Yellow - Moderate
Red - High
Purple - Very High
NAD Districts
NOT TO SCALE

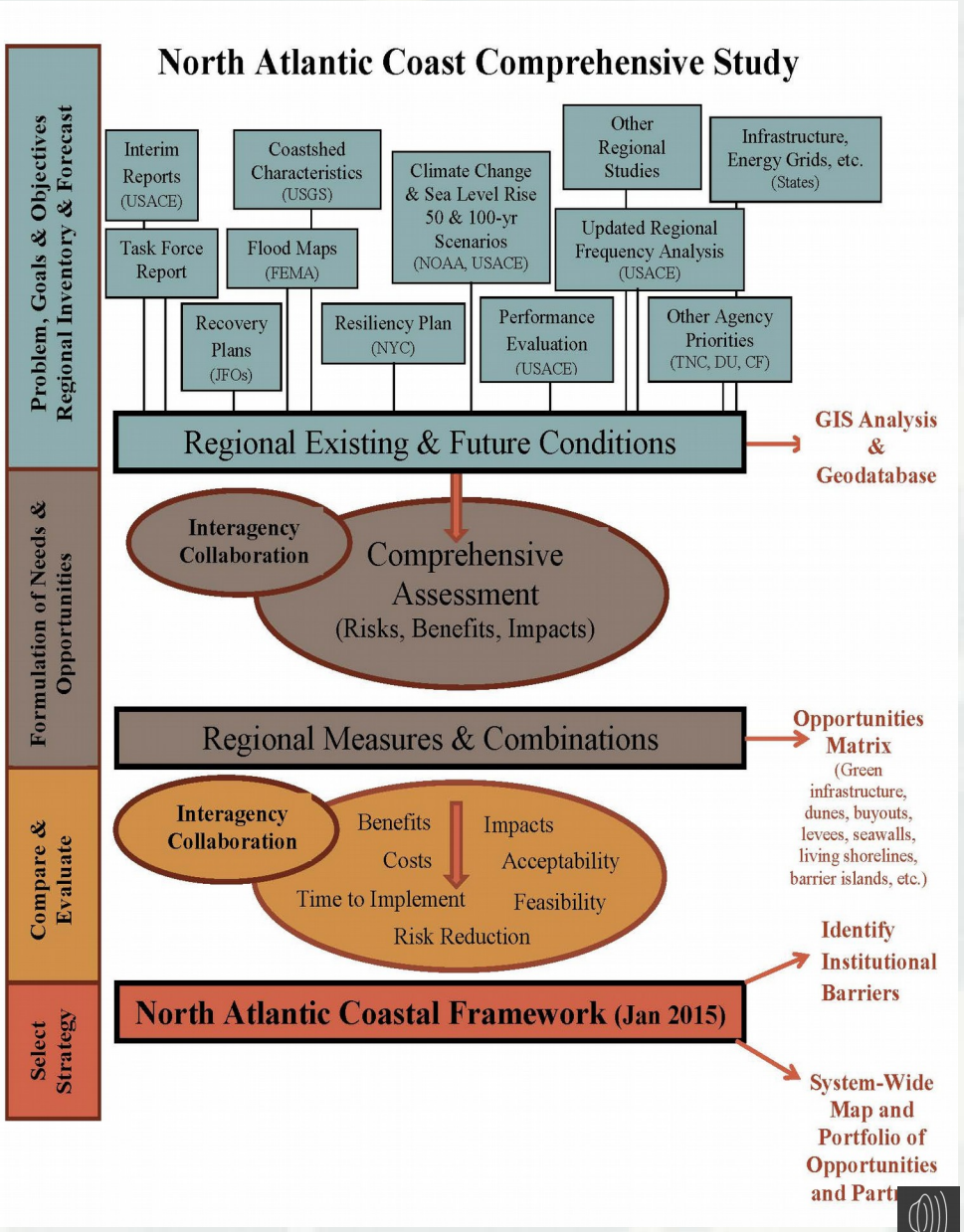
Goals

1. *Provide Risk Reduction Framework– Reduce risk to which vulnerable coastal populations are subject.*
2. *Promote Coastal Resilient Communities – Ensure a sustainable and robust coastal landscape system, considering future sea level rise and climate change scenarios, to reduce risk to vulnerable populations, property, ecosystems, and infrastructure.*

USACE-NOAA Rebuilding Principles

Scope: Process

- **Coastal Framework**
  - Regional scale
  - Interagency collaboration
  - Opportunities by region/state
  - Identify range of potential solutions and parametric costs by state
  - Identify activities warranting additional analysis
- **Team and Subteams**


North Atlantic Coast Comprehensive Study
Problem, Goals & Objectives Regional Inventory & Forecast
Formulation of Needs & Opportunities
Compare & Evaluate
Select Strategy
Interim Reports (USACE)
Coastshed Characteristics (USGS)
Climate Change & Sea Level Rise 50 & 100-yr Scenarios (NOAA, USACE)
Other Regional Studies
Infrastructure, Energy Grids, etc. (States)
Task Force Report
Flood Maps (FEMA)
Updated Regional Frequency Analysis (USACE)
Recovery Plans (JFOs)
Resiliency Plan (NYC)
Performance Evaluation (USACE)
Other Agency Priorities (TNC, DU, CF)
Regional Existing & Future Conditions
GIS Analysis & Geodatabase
Interagency Collaboration
Comprehensive Assessment (Risks, Benefits, Impacts)
Regional Measures & Combinations
Opportunities Matrix (Green infrastructure, dunes, buyouts, levees, seawalls, living shorelines, barrier islands, etc.)
Interagency Collaboration
Benefits
Costs
Time to Implement
Risk Reduction
Impacts
Acceptability
Feasibility
Identify Institutional Barriers
North Atlantic Coastal Framework (Jan 2015)
System-Wide Map and Portfolio of Opportunities and Part

Products

1. Coastal Framework (31,000 miles)

- ~36 reaches by shoreline type
- Identify likely future (post-Sandy) conditions
- Identify flood risk, and vulnerable populations & infrastructure including with sea level rise
- Identify range of measures to reduce risk
  - Structural
  - Non-structural (including green infrastructure and regional sediment mgmt)
  - Programmatic
- Screen and combine measures for minimal, moderate & aggressive approaches
- Identify planning-level costs, risk reduction and benefits/concerns for each measure

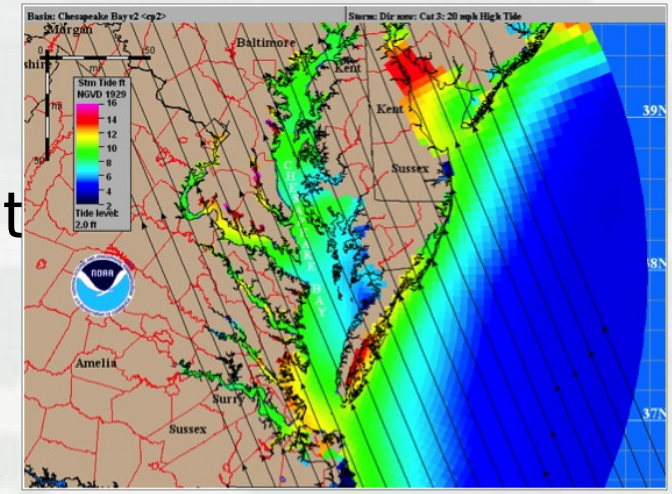
Products

2. Identification of institutional barriers and strategies to comprehensive implementation

3. Identification of activities warranting further analysis

4. Geodatabase of coastal data gat

5. Storm Suite modeling



6. No NEPA documentation, designs or construction (Congress provided study authority)

Schedule

29 Jan 13
Enactment of Supplemental Legislation PL 113-2

Develop draft scope of work
Phase 1
Interagency, tribal & non-governmental coordination to assemble existing/future conditions. Assessment & formulation of measures
Phase 2
Interagency & international validation & collaboration
Phase 3
Finalize comprehensive report & submit to Congress (January 2015)
Identify interagency contacts
Public Web Site
Interagency data collection & collaboration
Interagency webinars
Web Posting Draft Report & Online Public/Agency Input
Interagency coordination & collaboration
Interagency webinars
Jan 2013
Jan 2015
May 28, 2103
Modeling & Resiliency Working Meetings (June 2013)
Jan-Mar 2014
Stakeholder Workshops (dates TBD)

FEMA-NDRF Synchronization w/ missions scoping assessments

PHASE 1 [Months 1-14]
- √Initiate high level interagency coordination
  -federal, state, local, tribal
- √Develop communication strategy
- √Utilize existing data/GIS
- √Integrate sea level rise and climate change
- √ Integrate ongoing or planned data updates
- √ Identify data gaps/needs
- √ Identify existing problems
- √ Assess future conditions
- Identify structural and non-structural solutions
- Identify programmatic and policy solutions
- Identify USACE projects for repair, authorization, construction, etc.
- Integrate risk reduction measures
  term and long-term risks to existing facilities
  -Identify gaps in current risk reduction
  measures
  -Integrate Task Force & JFO Reports
- Identify/refine planning-level cost estimates and benefits/risk reduction

PHASE 2 [Months 15-18]
- Coordinate with federal, state, non-governmental, local and tribal agencies
- Define alternative approaches for systems analysis
- Develop concept animations and/or info-graphics
- Establish priority areas and implementation scheme
- Identify implementation and fiscal challenges (and solutions)

Product: Receive interagency and international comments

PHASE 3 [Months 19-24]
- Additional interagency collaboration, as needed
- Conduct district quality control
- Conduct concurrent reviews
- Resolve comments
- Prepare report and online materials

Product: Submit final report to Congress

Identify institutional barriers and develop coastal framework (complete by January 2015)

Jan 2015

Communication & Outreach

- Public Rollout/Outreach
  - Articles, interviews, speaking engagements, maps, FAQs
  - Press Release (28 May 2013)
  - Webpage (www.nad.usace.army.mil/CompStudy)
  - Public input surveys/polling (draft report)
- Interagency Collaboration
  - Official coordination letters (feds, states, tribes, non-governmental)
  - Federal Register notice (June)
  - Subject Matter Experts on subteams
  - Collaboration Webinar Series (July-Dec 2013)
  - Agency input surveys/polling (draft report)
  - ~March 2014, targeted stakeholder/collaboration

Next Steps
(July-December 2013)

- Interagency coordination and website outreach continues

You are here!

- Develop Framework by State
  - Future conditions and projections
  - Develop screening criteria for measures
  - Compile measures and combinations of measures
    - Diverse set of measures per shoreline type or geographic area/land use type
    - Describe benefits, challenges, etc of measures and combinations of measures
    - Identify likely set of appropriate measures per reach and resultant risk reduction

- Integrate Regional Plans
  - NYC Mayor's Report (12 May 2013)
  - Joint Field Offices State Recovery Support Strategies (tbd June 2013)

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